SCIENCE COMMITTEE MINORITY ADDITIONAL VIEWS
FY 2003 VIEWS AND ESTIMATES
TO THE HOUSE BUDGET COMMITTEE
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The Administration's FY 2003 R&D Request

The Administration's FY03 R&D budget request can be summarized simply: weapons development increases 12 percent, the National Institutes of Health (NIH) increases 17 percent, and all other civilian and defense R&D is collectively frozen.

There is a business-as-usual quality to the civilian R&D portfolio. As has been the case stretching back well into the Clinton Administration, NIH is slated to receive nearly all of the civilian R&D increase. But the sense of continuity - perhaps inertia is a better word - extends beyond NIH's primacy. Even the multi-agency R&D priorities of this budget are holdovers from the later Clinton budgets: anti-terrorism, networking and information technology, nano-technology, and climate change.

Last year's Minority Views noted four major themes in the budget submission:

- The request reversed the trend toward parity, achieved in FY01, between defense and non-defense R&D.
- The imbalance between biomedical R&D and R&D in the physical sciences was further exacerbated.
- The budget submission stopped in its tracks the growing consensus that the NSF budget should grow at least at the same rate as the NIH budget.
- Cooperative Federal-industry R&D programs fared poorly.

Each of these statements is as true for the FY03 submission as it was last year:

- Defense R&D constitutes 52 percent of total R&D, the second consecutive budget to reverse a 15-year trend toward a greater civilian share.
- For the first time, the HHS R&D request ($27.683 billion) exceeds the R&D request of all other Federal civilian R&D ($26.046 billion).
- The five-year doubling path for NSF, started in FY01, is officially off the rails. The Foundation's increase for R&D is 1.5%, well below inflation.
- Several R&D collaborations involving academic, industry, and government remain targeted, including the Advanced Technology Program, Manufacturing Extension Partnership, and aviation R&D.

It is clear to us that except for NIH, federal science funding is not a high priority for this Administration. It also appears that the trends noted above will persist, given Presidential Science Advisor John Marburger's February 15, 2001 statement that "… the life sciences may still be under-funded relative to the physical sciences".

Metrics

Over this placid environment for R&D, storm clouds lurk. Much of the civilian R&D portfolio, the budget warns, will be subject to impending programmatic or management reviews, or both. For example, funding for much of NASA's science and human space flight accounts will depend on future, undefined studies. The FY03 budget implies few commitments by the Administration to the continuation of the Space Station, Mission to Planet Earth, or the Outer Planetary Program. On a smaller scale, the Smithsonian may see some of its science portfolio transferred to NSF after further study.

Utilizing a grading system (red, yellow, and green lights) across five management measures, OMB spills much ink asserting that performance metrics were applied in making budget allocations. Paradoxically, the Department of Defense, with its 12% increase, receives five red lights for management. NIH stays on its doubling path even though HHS, its parent department, garnered five red lights. NASA manages a yellow light for financial management in a sea of red, even though inept financial management is cited as the reason for putting the agency's flagship program - the Space Station - on life support. Then there is NSF, whose score surpassed every Federal department. Its reward is that core R&D accounts would grow by a mere $53 million (1.5%), which is less than inflation. Despite assertions that management scores mattered, it appears to us that they had no effect whatsoever on a particular agency's budget. Metrics may become the cloak behind which politics can carry on as before with a new patina of impartiality.

In a word, the theme for this year's R&D budget is incremental change, but with major programmatic changes pending that will be justified with as-yet sketchy and opaque management criteria.

Majority Views

The Majority's Views and Estimates do question some proposed Administration cuts and correctly note areas where budgetary legerdemain masks sub-inflationary increases. However, it is difficult to take a firm position on the Majority's Views since they fail to meet the legislative mandate of five-year funding recommendations for all agencies under the Committee's jurisdiction. Despite its failings, however, many of us signed the Majority's Views to show support for the Chairman, and because the content of their report was both inoffensive and generally pointed in the right direction.

Our deference to the Chairman should not be viewed as indifference to the fate of Federal R&D funding. We believe the Majority should have gone

farther. What particularly concerns us is that R&D requests for three premier scientific agencies - NSF, NASA, and DOE - fail to keep pace with inflation. It is appropriate to remember the wise words of the Hart-Rudman Commission on National Security/21st Century, which completed a thorough assessment of the nation's post-Cold War security challenges six months before the attacks of September 11, 2001. The report, which accurately predicted terrorist attacks on U.S. soil, emphasizes that the U.S. "has seriously under-funded basic scientific research" and recommends that federal R&D funding be doubled by 2010. This recommendation is more, not less, relevant in the wake of last year's terrorist attacks and underscores the inadequacy of the FY03 civilian R&D request.

In this report, we have provided our views of R&D in the President's request. What follows is our guidance on specific aspects of agency budgets.

National Science Foundation

In light of the essential role which research plays in economic growth and national security, we are disappointed with the Administration's request for NSF. The $3.902 billion increase requested for NIH is by itself greater than the entire $3.783 billion Research and Related Activities account at NSF. According to OMB reporting requirements, the portion of NSF's budget devoted to research and research infrastructure would be increased by only $53 million - or 1.5% - under the President's request (after subtracting transferred programs). We believe that NSF should be put on a path to double its significant research and education work. H.R. 1472, introduced last year by Representative Eddie Bernice Johnson, calls for 15 percent increases to NSF's budget and this is what we would suggest to the Budget Committee. We recommend that the Function 250 account be adjusted to reflect an NSF research budget of $4.17 billion for FY03, with concomitant increases in the out-years.

National Aeronautics and Space Administration

The proposed increase for NASA is only 0.66 percent, continuing the pattern of disappointing NASA budget requests that fail to keep pace with inflation. This year's meager increase does not remotely match the tasks confronting the agency. The budget request repeatedly defers needed funding increases to the indefinite future while downplaying the impact of those deferrals. For example:

- Funding for aeronautics R&D is once again cut, this year to one-half of its FY98 level. One impact would be NASA's inability to meet its announced 10-decibel aircraft noise reduction target by 2007.
- The Shuttle program suffers a loss of $500 million in safety upgrades, even though we will be dependent on the Shuttle for at least the next fifteen years.

- No funding beyond FY03 is provided for follow-on Earth science missions pending completion of an Administration review of global change research.
- The crew capabilities and equipment needed to make the Space Station a useful research facility are eliminated.

The five-year budget request for NASA will require augmentation if NASA is to safely and successfully accomplish its missions. We would advise the Budget Committee to provide annual 3% budget increases to NASA for five years, so that it can avoid losing additional ground to inflation and begin to address its backlog of important obligations.

Department of Energy

The Federal budget picture has changed dramatically since the passage of comprehensive energy legislation (H.R. 4) in August of 2001. Therefore, we recommend that the Budget Committee adopt FY03 funding levels for functions 250 and 270 that would accommodate the funding level contained in H.R. 4 for FY02. Out-year numbers would also track the funding levels contained in H.R. 4, building on the FY02 levels as appropriate. In line with H.R. 4, we recommend that the Budget Committee increase Function 250 by $300 million with instructions that the Office of Science receive $3.6 billion in FY03. In Function 270, H.R. 4 provided $625 million for Energy Conservation and Energy Efficiency at DOE, and $535 million for Renewable Energy - about $200 million above the FY03 request.

Conclusion

Many in the science and education community are asking whether there is an “imbalance” in our research portfolio, with an over-concentration of funding in the biomedical sciences. By freezing NSF while kicking NIH down the path towards its five-year doubling goal, the Administration exacerbates this problem. We don’t pretend to know what the exact balance among science investments should be, but our intuitive sense is that there is already an imbalance, and making it worse is not a productive step.

We stand ready to engage the Administration in an ongoing dialogue about the best way to invest in the future of our Nation. We hope that the Budget Committee will not wait for the Administration to understand the lesson of the Hart-Rudman Commission - that R&D, the lifeblood of innovation, underlies both economic growth and national security.

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